

A Quasi Experimental Study to Evaluate the Effectiveness of Health Awareness Programme on Prevention of Breast Cancer and Developing Skill on Breast Self-Examination among Women at Selected Area in Alnamas

Dr. Ghadha Nazeer*, Dr. Blessing Nima Sajai XS

Applied Medical Science College for Females, Alnamas, University of Bisha Saudi Arabia

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*Corresponding author: Dr. Ghadha Nazeer

Abstract

Today world is facing more health challenges and one of the most challenging dangerous killing disease is cancer which can affect any person in any part of their body without any differentiations in age, sex, and colour etc ...Cancer is the abnormal, uncontrollable, continuous replication of cells which will inevitably lead to the formation of a tumor. Breast cancer is one of the common cancer affecting women, early detection with the help of breast self examination can help them to save their life from breast cancer. According to WHO, in 2018, world-wide it is estimated that 627,000 women died from breast cancer – that is approximately 15% of all cancer deaths among women. Statistics report published in Saudi Medical Journal by Faculty of Sciences, Department of Biology, University of Tabuk, Tabuk, KSA, shows that the number of women with breast cancer increased steadily from 1990-2010. The percentage distribution of breast cancer appears to be increasing. There were 1152 female cases in 2008 in comparison with 1308 in 2009, and 1473 in 2010. Breast cancer ranked first among females accounting for 27.4% of all newly diagnosed female cancers (5378) in the year 2010. The average age at the diagnosis of breast cancer was 48; weighted average was 49.8, and range 43-52., so we conducted A Quasi Experimental Study To Evaluate The Effectiveness Of Health Awareness Programme On Prevention Of Breast Cancer And Developing Skill On Breast Self Examination Among Women At Selected Area In Alnamas, Kingdom Of Saudi Arabia . 70 patients were selected by convenient sampling method. Researcher's convenience and familiarity with settings were added reason. The tool used for the study includes demographic data , observation check list for the investigator to assess the skill level in performing breast self examination and a structured questionnaire was developed to assess the knowledge regarding prevention of breast cancer and breast self-examination . After collecting the data, the data analysis was done according to the objectives of the study using descriptive statistics and inferential statistics. The study findings reveals that there was significant increase in post test knowledge & breast self examination skill scores through health awareness programme. The gain in knowledge score was significant at 0.05 level of significant and calculated paired t test value is 7.7978 which is greater than table paired t value 2.75, also the gain in breast self examination skill score was significant at 0.05 level of significant and calculated paired t test value is 10.6398 which is greater than table paired t value 2.75 .Findings revealed that health awareness programme on prevention of breast cancer and developing skill on breast self examination was an effective teaching strategy in gain in knowledge of the women. The findings also revealed that there was significant association between knowledge level and age, citizenship, Education of the participant, Occupation of the participant, information received before regarding breast cancer and breast self-examination, Family history of breast cancer. But there is no association between knowledge level and Religion, Marital status, any previous breast problem, Family income per –month.

Keywords: Evaluate, effectiveness, breast cancer, breast self examination, skills.

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INTRODUCTION

"Save women from breast cancer by educating and developing the skill in doing breast self-examination"

Today world is facing more health challenges and one of the most challenging dangerous killing

disease is cancer which can affect any person in any part of their body without any differentiations in age, sex, colour etc ...Cancer is the abnormal, uncontrollable, continuous replication of cells which will inevitably lead to the formation of a tumor. Breast cancer is one

of the common cancer affecting women, early detection with the help of breast self examination can help them to save their life from breast cancer. It is the second most frequent cancer and the fifth cause of cancer-related mortality.

According to WHO, in 2018, worldwide it is estimated that 627,000 women died from breast cancer – that is approximately 15% of all cancer deaths among women. According to the International Agency for Research on Cancer (IARC), in 2012, 1.7 million women were diagnosed with breast cancer and there were 6.3 million women alive who had been diagnosed with breast cancer in the previous five years. Statistics report published in Saudi Medical Journal by Faculty of Sciences, Department of Biology, University of Tabuk, Tabuk, KSA, shows that the number of women with breast cancer increased steadily from 1990-2010. The percentage distribution of breast cancer appears to be increasing. There were 1152 female cases in 2008 in comparison with 1308 in 2009, and 1473 in 2010. Breast cancer ranked first among females accounting for 27.4% of all newly diagnosed female cancers (5378) in the year 2010. The average age at the diagnosis of breast cancer was 48; weighted average was 49.8, and range 43-52

"The difficulty lies not so much in developing new ideas as in escaping from old ones."

Breast self-examination (BSE) still has an important role to play in the early detection of breast cancer in resource-constraint settings where routine clinical breast examination and mammography may not be feasible. In such settings, breast self-examination (BSE) is recommended because it is free, private, painless, easy, safe, and requires no specific equipment. Breast self-examination should be encouraged and every woman should know about symptoms and early signs of breast cancer with emphasis on the importance of early breast cancer detection. It has also been shown to improve breast health awareness and thus potentially allow for early detection of breast anomalies and early treatment increases the chance of survival.

It is the responsibility of a health team member to educate and create awareness regarding prevention of breast cancer and developing the skill on breast self-examination among women's. The proposed study serves the women's with information and experience in doing breast self-examination which helps them early identification and seek medical attention before becoming worsen situation and get prevented from getting cancer in breast. The proposed study will benefits and help the future researcher as their guide. The study can also open in development of this study. As we are in nursing profession, we decided to saving women's from getting breast cancer and its further complications by teaching breast self examination, so we selected this study to evaluate the

effectiveness of health awareness programme on prevention of breast cancer and developing skill on breast self examination among women at selected area in Alnamas, Kingdom Of Saudi Arabia.

Statement of the Problem

A Quasi Experimental Study to Evaluate the Effectiveness of Health Awareness Programme on Prevention of Breast Cancer and Developing Skill on Breast Self Examination among Women at Selected Area in Alnamas

Aim/objectives of the study

To assess Effectiveness Of Health Awareness Programme On Prevention Of Breast Cancer And Developing Skill On Breast Self Examination Among Women At Selected Area In Alnamas.

Objectives

- To assess the pre-test knowledge level among women before giving health awareness programme on prevention of breast cancer and developing skill on breast self-examination.
- To assess the post-test knowledge level among women after giving health awareness programme on prevention of breast cancer and developing skill on breast self examination
- To assess the pre-test breast self examination skill level among women before giving health awareness programme on prevention of breast cancer and developing skill on breast self-examination.
- To assess the post-test breast self examination skill level among women after giving health awareness programme on prevention of breast cancer and developing skill on breast self-examination.
- To evaluate the effectiveness of health awareness programme on prevention of breast cancer and developing skill on breast self examination among women.
- To find out the association between knowledge level with their selected demographic variables.

Operational definition

Evaluate: Evaluate refers to determination of the knowledge and skill value

Breast Cancer: Breast cancer starts when cells in the breast begin to grow out of control. These cells usually form a tumor that can often be felt as a lump. The tumor is malignant (cancer) if the cells can grow into (invade) surrounding tissues or spread (metastasize) to distant areas of the body.

Hypothesis

Research hypotheses

The following research hypotheses were formulated to achieve the aim of the current study:

H1 - There will be a statistical significant difference in knowledge and skill level before and after health

awareness programme on prevention of breast cancer and developing skill on breast self-examination.

H 2- There will be a significant association between the knowledge levels of study subjects with their selected demographic variables

Assumption

Health awareness programme on prevention of breast cancer and developing skill on breast self-examination might have direct effect in early identification and prevention of breast cancer among women

Delimitation

The data collection is delimited to 7 weeks

The patients who are willing to participate during data collection

Projected outcome

The study findings helps to improve knowledge and skill level before and after health awareness programme on prevention of breast cancer and developing skill on breast self examination among women.

Limitation

The study was conducted among women at selected area in Alnamas, Kingdom of Saudi Arabia, generalization can be done but with caution

METHODOLOGY

This chapter includes research design, the setting of the study, the sample size, the criteria for sample selection, the methods of sample selection the instruments and tools for data collection, the technique of data analysis and protection of human subjects. The present study was designed to evaluate the effectiveness of health awareness programme on prevention of breast cancer and developing skill on breast self examination among women

Research Approach

The research approach used for this study was quantitative approach.

Research Design

The research design selected for the present study was quasi experimental one group pre-test post-test design. The Investigator had developed questionnaire and observational check list to evaluate the effectiveness of health awareness programme on prevention of breast cancer and developing skill on breast self examination among women .The research design adopted for the study is diagrammed as:

ONE GROUP	PRE TEST O1	INTERVENTION X	POST TEST O2
Women	Assess the knowledge level , skill level & Demographic data	Health awareness programme on prevention of breast cancer and developing skill on breast self examination	Assess the knowledge level , skill level & Demographic data

KEY :-

O1 = It is the first observation means assessment of pre-test score of knowledge level, skill level & Demographic data among women at selected areas in Alnamas.

X = Treatment to the group is the administration of the health awareness programme on prevention of breast cancer and developing skill on breast self examination.

O2 = It is the second observation means assessment of post-test score of knowledge level, skill level & Demographic data among women at selected areas in Alnamas.

C. Setting of the study

Setting of the study

The study was conducted at selected area, Alnamas, Kingdom of Saudi Arabia. 70 women were selected as samples for this study. This setting was selected because of the availability of participants and feasibility of conducting the study. Researcher's

convenience and familiarity with settings were added reason.

Population

The target population for this study is women at selected area in Alnamas, Kingdom of Saudi Arabia.

Sample

Sample consisted of 70 women who were residing in Alnamas, Kingdom of Saudi Arabia.

Sampling Technique

70 women who were residing in Alnamas, Kingdom of Saudi Arabia were selected by convenient sampling method

Criteria for sample selection

Inclusion Criteria

The women's who are willing to participate in the study, age between 18-70 years

Exclusion Criteria

Women who not interested to do breast self-examination, male gender

Research tool and technique

The tool used for the research study was demographic data, observation check list to observation check list for the investigator to assess the skill level in performing breast self examination and a structured questionnaire to assess the knowledge regarding prevention of breast cancer and breast self-examination.

Description of the tool

The tool used for the study includes two section that is section I and section II.

Section I

It had items related to demographic data consists of age in years, citizenship, education, occupation, religion, marital status, family income, received any information before regarding breast cancer and breast self-examination, any previous breast problem and family history of breast cancer.

Section II

Questionnaire to assess the knowledge regarding prevention of breast cancer and breast self-examination. It consist of 20 statement regarding prevention of breast cancer and breast self-examination and is divided into 2 main areas

Part A: General information regarding breast cancer.

Part B: Regarding Breast Self-Examination.

Scoring Procedure

The items were multiple choice types. Total score 20. Each correct response carry one score and incorrect response carry zero score

Between (16-20 Score) 80 and 100% - Good

Between (10-15Score) 50 and 75% - Average

Below (0-9 Score) 45 % - Poor

Section III

Observation checklist of breast self-examination: A three-point scale were used: not done= 0, done incorrectly=0.5 and done correctly=1. The total score of practice was 10 points.

Scoring Procedure

Between (9-10 points) 90 and 100% - Good

Between (6-8.5 points) 60 and 85% - Average

Below (0-5.5 points) 55 % - Poor

Data Collection Procedure

Before conducting the study, formal permission was obtained. Informed consent was obtained from the participants. The period of data collection was done for seven weeks. The researcher introduced self to each subject and explained the

purpose of the study and assessed the knowledge and skill level before conducting health awareness programme. Investigator demonstrated breast self-examination and its steps. After finishing health awareness programme again the knowledge and skill level were assessed.

Plan for data analysis

Data analysis was done according to the objectives of the study using descriptive statistics and inferential statistics.

Descriptive Statistics

Frequency percentage mean and standard deviation were used for the analysis.

Inferential Statistics

Paired "T" test was used for testing effectiveness of health awareness programme. Chi – square was used to determine the association between demographic variables with knowledge level.

Protection of human subjects

After the problem statement was approved formal permission was obtained before starting the study. The oral & written consent was obtained from each participants of the study before starting the data collection. Assurance was given to the subject that the anonymity of each individual would be obtained.

RESULTS & DISCUSSION

This section shows the result findings of the study which is based on data analysis and interpretation of data collected from the participants.

The data collected during the present study were analysed based on the objectives formulated for the study. The objectives of the study were.

- To assess the pre-test knowledge level among women before giving health awareness programme on prevention of breast cancer and developing skill on breast self-examination.
- To assess the post-test knowledge level among women after giving health awareness programme on prevention of breast cancer and developing skill on breast self-examination.
- To assess the pre-test breast self examination skill level among women before giving health awareness programme on prevention of breast cancer and developing skill on breast self-examination.
- To assess the post-test breast self examination skill level among women after giving health awareness programme on prevention of breast cancer and developing skill on breast self-examination.
- To evaluate the effectiveness of health awareness programme on prevention of breast cancer and developing skill on breast self examination among women.

- To find out the association between knowledge level with their selected demographic variables.

A. Organization of the Findings

Organization of the Findings

In order to find out the relationship between the variables and also to be assess the knowledge and skill value the data gathered were tabulated, analyzed and interpreted using both descriptive and inferential statistics. The data are presented under the following headings.

Frequency and percentage of sample characteristics of the study

Table-1: Distribution of frequency and percentage of demographic variables (N=70)

Demographic factor	Category	% of Sample
Age	18-40years	51.42
	41-50years	20
	51-60years	15.71
	61-70years	12.85
Citizenship	Saudi	61.42
	Non Saudi	38.57
Education	Primary level of education	10
	Secondary level of education	17.14
	Higher level of education	54.28
	Graduate and above	18.57
Occupation	Unemployed	34.28
	Private Sector	11.42
	Government Sector	25.71
	Self-employed	28.57
Religion	Muslim	80
	Others	20
Marital status	Married	41.42
	Unmarried	32.85
	Widower	10
	Divorced/separated	15.71
Family income per –month	Less than2000SR	34.28
	2001SR-3000SR	10
	3001SR-4000SR	28.57
	4001SRand above	27.14
Have you received any information before regarding breast cancer and breast self-examination?	Yes	45.71
	No	54.28
Do you have any previous breast problem?	Yes	15.71
	No	84.28
Family history of breast cancer	Yes	11.42
	No	88.57

Table-2: Frequency and percentage of distribution of pre-test knowledge level (N=70)

Knowledge level	Frequency	Percentage
Good	11	15.71%
Average	13	18.57%
Poor	46	65.71%

Frequency and percentage distribution of sample characteristics of the study. Findings related to frequency and distribution of knowledge level of the participants. Findings related to frequency and distribution of skill level of the participants.

Association between knowledge level and demographic variables such as age, year of study, previous education syllabus, parent education, family income, area of residence.

Table-3: Frequency and percentage of distribution of post-test knowledge level (N=70)

Knowledge level	Frequency	Percentage
Good	43	61.42%
Average	20	28.57%
Poor	07	10%

The data from the above table 2 & 3 shows that scoring difference between pre-test and post-test. It shows that in pre-test among all women majority of 46(65.71%) poor knowledge, 13(18.57%) scored average knowledge and 11(15.71%) scored good

knowledge. In the post-test there was marked improvement in the knowledge of women. In post-test score maximum 43(61.42%) women scored good knowledge and 20(28.57%) scored average knowledge and only 7(10%) scored poor knowledge score.

Table-4: Frequency and percentage of distribution of pre-test breast self examination skill (N=70)

Breast Self-Examination Skill level	Frequency	Percentage
Good	13	18.57%
Average	12	17.14%
Poor	45	64.28%

Table-5: Frequency and percentage of distribution of post-test breast self examination skill (N=70)

Breast Self-Examination Skill level	Frequency	Percentage
Good	47	67.14%
Average	15	21.42%
Poor	08	11.42%

The data from the above table 4 & 5 shows that scoring difference between pre-test and post-test. It shows that in pre-test among all women majority of 45(64.28%) poor skill, 12(17.14%) scored average skill and 13(18.57%) scored good skill. In the post-test there

was marked improvement in the breast self-examination skill level of women. In post-test score maximum 47(67.14%) women scored good skill and 15(21.42%) scored average skill and only 8(11.42%) scored poor skill level.

Table-6: Determine the effectiveness of health awareness programme on prevention of breast cancer and developing skills of breast self examination (N=70)

1.PARAMETERS	MEAN SCORE		N	Paired “t”	“p-value” (One Pre- tailed)
	Pre-Test Knowledge Level	Post-Test Knowledge Level			
Mean knowledge score	9.00	14.96	70	7.7978	< 0.001
2.PARAMETERS	MEAN SCORE		N	Paired “t”	“p-value” (One Pre- tailed)
	Pre-Test Knowledge Level	Post-Test Knowledge Level			
Mean Breast Self-Examination Skill score	5.5	8	70	10.6398	<0.0001

There was significant increase in post test knowledge & breast self examination skill scores through health awareness programme. The gain in knowledge score was significant at 0.05 level of significant and calculated paired t test value is 7.7978 which is greater than table paired t value 2.75, also the gain in breast self examination skill score was significant at 0.05 level of significant and calculated paired t test value is 10.6398 which is greater than table paired t value 2.75 .Findings revealed that health awareness programme on prevention of breast cancer and developing skill on breast self examination was an effective teaching strategy in gain in knowledge of the women.

The findings also revealed that there was significant association between knowledge level and age, citizenship, Education of the participant,

Occupation of the participant, information received before regarding breast cancer and breast self-examination, Family history of breast cancer. But there is no association between knowledge level and Religion, Marital status, any previous breast problem, Family income per –month.

CONCLUSIONS

All women are expected to be aware of both the appearance of their breasts and the feeling given by them in order to detect the changes in their breasts, as well as to report them to their physicians. Health awareness programme has much influence in the early detection and treatment of blood cancer, a community-based educational intervention through demonstration of BSE stressing on thoroughness and the recommended technique significantly increased the overall awareness

regarding breast cancer screening. And by developing the breast self-examination skill we can save women mortality due to breast cancer.

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